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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,590	08/22/2003	Hidekazu Michioka	2003P12857US	8583

7590 11/16/2005

SEIMENS CORPORATION
INTELLECTUAL PROPERTY
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EXAMINER

KIM, CHRISTOPHER S

ART UNIT PAPER NUMBER

3752

DATE MAILED: 11/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/645,590

Applicant(s)

MICHIOKA ET AL.

Examiner

Christopher S. Kim

Art Unit

3752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-19 and 22-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-19 and 22-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 25, 2005 has been entered.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
4. Claims 14-24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 19 and 22 recite "...providing the seat with a plurality of passages between the surface and the fuel outlet, the seat having an

exit passage disposed on the longitudinal axis at the fuel outlet..." The specification fails to teach an exit "passage" disposed on the longitudinal axis. The specification appears to disclose that the passages are inclined relative to the longitudinal axis (see Summary of the Invention, on pages 1-2). It appears that applicant is attempting to use the terms "passage" and "outlet" interchangeably. If "passage" requires more than an orifice, i.e. a passage requires some appreciable length, the specification fails to disclose a passage on the longitudinal axis and this rejection would be applicable. If a "passage" can be defined by an orifice, i.e. a passage does not require any appreciable length and can be defined by an opening, this rejection would not be applicable, but the "exit passage" would constitute a double inclusion of the "fuel outlet" recited in lines 3-4 of claims 19 and 22.

5. Claims 14-19 and 22-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 13 recites the limitation "an exit passage" in line 7. It appears to be a double inclusion of the fuel outlet recited in line 3.

Claim Rejections - 35 USC § 102

6. Claims 14-19 and 22-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Furuya et al. (5,586,726).

Furuya discloses a method of generating a spray pattern from a fuel injector having a body 2; a needle 3, 21; a seat 11; a fuel outlet/exit passage 10, 26; a plurality of passages 8, 9, 24, 25.

The distance, cross-section, inclination of the junction of passages 24 and 25 (and similarly 8 and 9) are different than the distance, cross-section, inclination of the passages 8 and 24 at the inlet.

The distance, cross-section, inclination of the junction of passages 8 and 24 are the same as the distance, cross-section, inclination of the passages 8 and 24.

Double Patenting

7. Claims 14-19 and 22-24 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 13-19 and 22-24 of U.S. Patent No. 6,799,733. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of '733 fully discloses the claimed invention of the present application. The '733 claims recite further details than the presently claimed invention, i.e. the currently claimed invention is broader than the '733 claims. The absence of the detailed features are a mere elimination of parts/features and its function. It has been held that omission of an element and its function in a combination where the remaining elements perform the same functions as before involve only routine skill in the art. *In re Karlson*, 136 USPQ 184.

Response to Arguments

8. Applicant's arguments filed August 25, 2005 have been fully considered but they are not persuasive.

Applicant argues that claim 19 requires "at least one of the plurality of passages is at a different distance from the longitudinal axis than the other passages." Furuya discloses a passage 8, 24 which is at a different distance from the longitudinal axis than passage 9, 25.

Applicant argues that claim 22 requires "at least one of the plurality of passages has a different cross section than the other passages." Furuya discloses a passage 8, 24 which has a different cross section than passage 9, 25.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher S. Kim whose telephone number is (571) 272-4905. The examiner can normally be reached on Monday - Thursday, 6:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Scherbel can be reached on (571) 272-4919. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Christopher S. Kim
Primary Examiner
Art Unit 3752

CK